

REMARKS

With this Response, claims 1, 13, 18, 24, and 29 are amended. No claims are added or canceled. Therefore, claims 1, 3-14, 16-25, 27-30, and 32-33 are pending.

REGARDING THE CLAIM AMENDMENTS

Applicants submit that the amendments to the claims herein are supported by the Specification as originally filed, at least at the paragraphs [0026], [0032], [0036], and [0051]. Thus, no new matter is entered.

CLAIM OBJECTIONS

Claims 18-23 were objected to because Claim 18 depended from cancelled claim 15. Claim 18 is amended herein to depend from Claim 14. Therefore, Applicants submit the objection is overcome, and respectfully request that the claim objection be withdrawn.

BRIEF OVERVIEW OF THE CLAIMED SUBJECT MATTER

To facilitate expeditious examination and allowance of the pending claims, Applicants provide a brief description of some novel aspects of the claimed invention.

As stated in the Applicants' background as originally filed, JMA systems did not traditionally provide a visual monitoring mechanism. See paragraph [0006]. In addition, there did not exist a mechanism for monitoring individual components of a system, without requiring such monitoring information to be centrally collected.

Accordingly, Applicants teach a novel method of creating a hierarchical monitoring tree, where each node in the tree independently monitors some resource(s) in the network. Such a node is composed of a "monitor managed" bean (e.g., an MBean) and the resource(s) the MBean is monitoring. The "monitor managed" bean collects monitoring information about the associated resource(s) from "runtime managed" beans that are also associated with the resource(s) being monitored. Such teachings are embodied in claim 1 which recites:

wherein the monitor tree includes a hierarchical grouping of a plurality of nodes, each of the plurality of nodes having
a monitor managed bean and one or more resources of the plurality
of resources associated with the monitor managed bean, where the monitor

managed bean collects information about each associated resource from the runtime managed bean associated with the resource(s) and

wherein the monitor managed bean of each node of the monitor tree provides an individual report of the collected information resource(s) associated with the monitor managed bean of the node to the monitoring system, where the monitor tree enables distributed monitoring of the resources without requiring all monitoring data to be reported to a central location of the JMA;

The structure consisting of distributed monitoring nodes enables a visual administrator to directly access the monitoring information of individual resources by accessing the "monitor managed" bean in the monitoring node of the desired resource, by accessing each node individually. Collecting monitoring information in these distributed nodes is a novel alternative to the conventional method of collecting monitoring information in a central location. Claim 1 further recites:

the visual administrator providing an interface to access individual nodes of the monitor tree to access monitoring information about the resource(s) of the node, as provided by the associated monitor managed bean, without requiring all monitoring data to be collected at a central location.

The hierarchical structure of the monitoring tree is described in a file having semantics and directives. Such files contain code that defines the MBeans and generates the relationships between the various MBeans and resources to be monitored, which creates the monitoring structure. These semantics and directives enable the creation of the monitoring structure through access to these files. Claim 1 recites limitations directed to such teachings as follows:

where the semantics and directives define a hierarchical architecture of a monitor tree that monitors a plurality of resources of a cluster of application servers spanning multiple Java virtual machines (JVMs),

the semantics defining code to generate the monitor tree, include information about monitor managed beans, and resources to be monitored and

the directives defining how the semantics are to be implemented to form the monitor tree,

Thus Applicants teach the unique monitoring system, and such monitoring system is recited in the independent claims.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1, 3-7, 13-14, 16-17, 24-25, 27-28 and 29-30 are rejected under 35 USC §103 as being unpatentable over U.S. Patent Publication No. 2004/0019662 of Viswanath (hereinafter "Viswanath") in view of U.S. Patent No. 6,664,978 of Kekic et al. (hereinafter "Kekic").

Of these claims 1, 13, 24, and 28 are independent claims. Each of these claims recite limitations directed to a monitor tree for a JMA monitoring system, where the monitor tree has a monitor managed beans and runtime managed beans, and a visual administrator that provides a graphical user interface to the monitoring system via a monitor service.

The combination of Kekic and Viswanath is improper. In response to the stated rejections, Applicants have not argued that features of Kekic's system must be bodily incorporated into the structure of Viswanath's system; nor have Applicants argued that the claimed invention be expressly suggested in any one or all of the references. Rather, Applicants previously pointed out and reiterate here that if Viswanath's disclosed system were to be modified to incorporate Kekic's disclosed functionality, Viswanath's system would cease to function as described.

Rather than following the Java Monitoring Architecture as Viswanath discloses and Applicant's claims recite, Kekic follows the SNMP standard. The use of MBeans for monitoring is limited to systems compliant with the Java Monitoring Architecture. In place of MBeans, Kekic monitors and controls the operations of the computer network elements by maintaining a database of objects which reflects the elements' status and an agent that responds to requests and sends messages about network events. [Column 2, lines 33-45]. Modifying Viswanath's system to make use of Kekic's monitoring mechanism would require one of two changes not disclosed in the references. The first option would require creating a system that utilizes SNMP, and thus would no longer be JMA compliant as stated in Applicants' claims. The second option would be to establish a JMA architecture that allows distributed monitoring. The disclosure of distributed monitoring in an SNMP system does not disclose to one of skill in the art how to modify a JMA system to perform distributed monitoring in place of the centralized monitoring that is assumed in a JMA system.

Either modification would render Viswanath's claimed invention as unsatisfactory for its intended purpose. Viswanath's disclosed system functions by having a group of MBeans (management beans) execute methods that represent the business logic of a system. If instead of

MBeans, Viswanath's system used a mechanism consisting only of a database and notifying agent, as Kekic suggest, such a mechanism would be unable to carry out the execution of a method. As a result, the modification would break the functionality of Viswanath's system, whether or not the two systems were bodily incorporated, thereby rendering it unsatisfactory for its intended purpose. Therefore, there is no suggestion or motivation to make the proposed modification as stated in MPEP § 2143.01(V).

Even if Viswanath's disclosed system could be properly modified to incorporate Kekic's disclosure, which Applicants maintain is improper, both Viswanath and Kekic still fail, among other defects, to expressly or inherently disclose "the semantics defining code to generate the monitor tree, including information about monitor managed beans, resources to be monitored, and the relationships between the monitor managed beans and the resources".

Viswanath discloses using meta-information that describes relationships between the elements of a system to create the beans representing those elements or to create a framework that reflects a relationship between those elements [0024]. The stored information that is accessed is not used to create the entire architecture, but rather only the portion of the architecture that is simply an embodiment of the relationships between elements of a system.

The information that Applicants' claimed invention uses to create the monitoring tree structure does not merely describe already-present relationships between elements, but also defines relationships between monitor managed beans and resources that are created especially to enable distributed monitoring. The defined structure is not just a description of how elements in a network are organized, but rather fully defines the specific configuration needed to enable distributed monitoring. The resulting distributed nature of the monitor tree structure allows the visual administrator to directly access information about individual resources.

Kekic also fails to disclose or suggest "the semantics defining code to generate the monitor tree, including information about monitor managed beans, resources to be monitored, and the relationships between the monitor managed beans and the resources." Kekic does not disclose any structure that is generated from code. Much less does it disclose code that defines monitor managed beans, resources to be monitored, or the relationships between them.

Thus, whether alone or in combination, Viswanath and Kekic fail to disclose or suggest at least one element of the independent claims. The dependent claims include all limitations of the independent claims from which they depend. Thus, the remaining claims, being dependent claims, likewise recite at least one limitation not disclosed or suggested by the cited references. Therefore, these claims are not rendered obvious by the cited references, and Applicants respectfully request that the rejection of these claims be withdrawn.

Claims 8-12, 18-23 and 32

These claims were rejected over 35 USC §103 as being unpatentable over Viswanath in view of Kekic as applied to claims 7, 15 and 30 above, and further in view of U.S. Patent Application Publication No. 2003/0177477 to Fuchs (hereinafter "Fuchs").

These claims are not rendered obvious by the cited references. Fuchs is cited as disclosing various tabs and other features. However, Fuchs does not cure the deficiencies of Viswanath and Kekic. Whether alone or in combination, the cited references fail to disclose or suggest at least one limitation of the claims as set forth above, and so fail to render obvious the invention as recited in Applicants' claims. Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

Claim 33

This claim was rejected over 35 USC §103 as being unpatentable over Viswanath in view of Kekic as applied to claim 1 above, and further in view of U.S. Patent Application Publication No. 2003/0041142 to Zhang (hereinafter "Zhang").

This claim is not rendered obvious by the cited references. Zhang does not cure the deficiencies of Viswanath and Kekic. Whether alone or in combination, the cited references fail to disclose or suggest at least one limitation of the claims as set forth above, and so fail to render obvious the invention as recited in Applicants' claims. Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

CONCLUSION

For at least the foregoing reasons, Applicants submit that the rejections are overcome, and respectfully request that the rejections be withdrawn. Therefore, all pending claims are in condition for allowance, and such action is earnestly solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application.

Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,
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I hereby certify that this correspondence is being submitted electronically via EFS Web on the date shown below.

Date: July 28, 2009

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